S2 Table: Laurasiatherian cranial synapomorphies and condition observed in MPEF PV $695\,$

Cranial synapomorphies of Laurasiatheria	Condition observed in MPEF PV 695
according to O'Leary [3]	
(15) Alveolar line in a plane that intersects the	It matches MPEF PV 695 morphology
glenoid fossa	
(62) Dorsoventral thickness of slightly deeper than	It matches MPEF PV 695 morphology
the length of the incisor roots	
(190) Short facial process of the lacrimal	There is no facial process
(581) Epitympanic wing anterior to promontorium	Intermediate, less than two thirds the
width equal or more than two thirds the width of the	width of promontory
promontorium	
(746) Large stapedial fossa circumference, more than	? (Not enough ct resolution)
twice the circumference of fenestra vestibuli	
(771) Posterodorsal position of incisura tympanica	? (Ectotympanic contacts to surrounding
	elements are not distinguishable)
(852) Presence of muscular process of malleus	? (Not preserved)
(1044) Nuchal crest anterior to posterior surface of	In line with posterior surface of occiput
occiput	and slightly projected posteriorly
(1339) I1 spatulate (not conical)	It matches MPEF PV 695 morphology
(1429) C1 height similar to adjacent teeth	It matches MPEF PV 695 morphology
(1805) Absence of metacone on P4 (P3 in this paper)	Present? (inferred besed on the presence
	of metaloph)
(1814) Absence of protocone on P4 (P3 in this paper)	Present? (inferred based on the presence
	of protoloph)
(1930) Talon of deciduous P5 (P4 in this paper)	? (No deciduous P4 in MPEF PV 695)
notably smaller than the trigon	
(1945) area of P5 (P4 in this paper) subequal to M1	Area of P5 (P4 in this paper) is smaller
	than M1
(1979) Paracone of P5 (P4 in this paper) significantly	not applicable considering lophodont
higher than paracone of M1	condition and wear stage
(2378) Centrocrista of M1 extends barely above the	not applicable considering lophodont
level of the stylar shelf	condition and wear stage